

**Notice of Allowability**

Application No.

10/665,942

Examiner

Helen O. Chu

Applicant(s)

BOURGEOIS, RICHARD SCOTT

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/2/2007.
2. ☒ The allowed claim(s) is/are 1,3-15,17-21,38,40-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's Amendments was received on November 2, 2007. Claims 1, 11, 38 have been amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action.

#### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2007 has been entered.

#### ***Claim Rejections - 35 USC § 103***

4. The rejections under 35 U.S.103(a), on claims 1, 3-5, 7-15, 18-21, 38, 40, 41 and 43 as unpatentable over Bossel in view of Oko et al. as evidence by Wygnaski are withdrawn because Applicant has amended the claims.
5. The rejections under 35 U.S.103(a), on claims 6, 17, 42 as unpatentable over Bossel in view of Oko et al. and further in view of Hsu are withdrawn because Applicant has amended the claims.

#### ***Allowable Subject Matter***

6. The following is an examiner's statement of reasons for allowance: The closest prior art to the Applicant's claimed invention is U.S. Patent 6,344,290 to Bossel, U.S. Patent 6,218,038 to Oko et al., and U.S. Patent 7,021,603 to Wygnaski.

Regarding claim 1, the prior art fails to teach a fuel cell stack assembly comprising at least a first fuel cell and a second fuel cell electrically coupled together such that at least one sealed passage extends between said first and second fuel cells, each said fuel cell comprising at least one hollow manifold comprising a wall extending between a first end and a second end, each said wall defining a chamber therein, said wall comprising at least one opening extending therethrough in flow communication with said chamber; and at least one fuel cell isolation device including a jumper said fuel cell isolation device coupled in flow communication with each of said fuel cell hollow manifold, said at least one fuel cell isolation device being variably positionable during fuel cell stack assembly operation for selectively stopping fluid flow through at least one of said fuel cells and for positioning said jumper to short circuit said at least one fuel cell.

Regarding claim 11, the prior art fails to teach a fuel cell stack coupled in flow communication to an air source and a fuel source, said fuel cell stack comprising: at least two fuel cells coupled together in flow communication such that at least one sealed passage extends between said at least two fuel cells; a plurality of interconnects electrically coupling said at least two fuel cells together such that at least one interconnect extends between each adjacent pair of said at least two fuel cells; and at least one fuel cell isolation device including a jumper, coupled in flow

communication with each of said at least two fuel cells, said at least one fuel cell isolation device selectively positionable during operation of said fuel cell stack to position said jumper to short circuit said at least one fuel cell from said remaining at least two fuel cells.

Regarding claim 38, the prior art fails to teach fuel cell isolation assembly for use with a fuel cell stack including at least two fuel cells, said fuel cell isolation assembly comprising a fuel cell isolation device including a jumper, configured to be positioned within a sealed passage extending between the two fuel cells; and an actuator coupled to said fuel cell isolation device for controlling movement of said fuel cell isolation device such that said fuel cell isolation device is selectively positionable within the sealed passage during operation of the fuel cell stack to electrically isolate at least one of the fuel cells from the remaining fuel cells by short circuiting said at least one fuel cell via said jumper.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen O. Chu whose telephone number is (571) 272-5162. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HOC

  
TRACY DOVE  
PRIMARY EXAMINER  
11/07